

CLAIMS

1. An installation for drying pasty or powdery  
5 products such as in particular waste and more  
particularly sludge from wastewater purifying stations,  
in a chamber receiving the products to be dried, and  
which is provided with means for turning over and  
routing said products, this installation being  
10 characterized in that it comprises a greenhouse with  
translucent or transparent walls (1), erected on a slab  
or floor (2) upon which the bed (3) of products to be  
dried is deposited, this slab being equipped with said  
turning over and routing means, and further comprises  
15 one or more wind generators (4) generating energy which  
is degraded in the form of heat which is restored in  
the slab (2) upon which the bed of products to be dried  
(3) is spread.

20 2. The installation as claimed in claim 1,  
characterized in that said wind generators (4) generate  
electrical energy supplying resistors embedded in the  
slab (2).

25 3. The installation as claimed in claim 1,  
characterized in that said wind generators actuate a  
heat pump (7) comprising a compressor and two heat  
exchangers: one constituting the hot source which  
transfers heat to the slab (2) and the second  
30 constituting the cold source, condensing the moisture  
in the air entering the greenhouse (1).

4. The installation as claimed in any one of the  
preceding claims, characterized in that it comprises  
35 ventilation means combining natural ventilation with  
intermittent forced ventilation.

5. The installation as claimed in any one of the  
preceding claims, characterized in that it comprises

regulating means comprising sensors measuring the temperature of the bed (3) of products to be dried, the air temperature respectively inside and outside the greenhouse (1) and the humidity of the air, these  
5 sensors actuating mobile louvers (5,6) provided, respectively, in the top portion and in the bottom portion, on the walls of the greenhouse (1) in order to regulate the natural convection removing the moisture-laden air.

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6. The installation as claimed in claim 5, characterized in that it further comprises programming and automation means.

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7. The installation as claimed in any one of the preceding claims, characterized in that the means provided in the slab (2) for turning over and routing the bed (3) of products to be dried are provided in the form of rotating rollers, equipped with toothed harrows  
20 serving to break up the bed (3) while transporting the bed from the inlet to the outlet of the greenhouse.

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8. The installation as claimed in claim 4, characterized in that the forced ventilation means are supplied with energy from said wind generators (4).

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9. The installation as claimed in claim 7, characterized in that the means provided in the slab (2) for turning over and routing the bed (3) of products to be dried are supplied with energy from said wind generators (4).